

664727 82259160

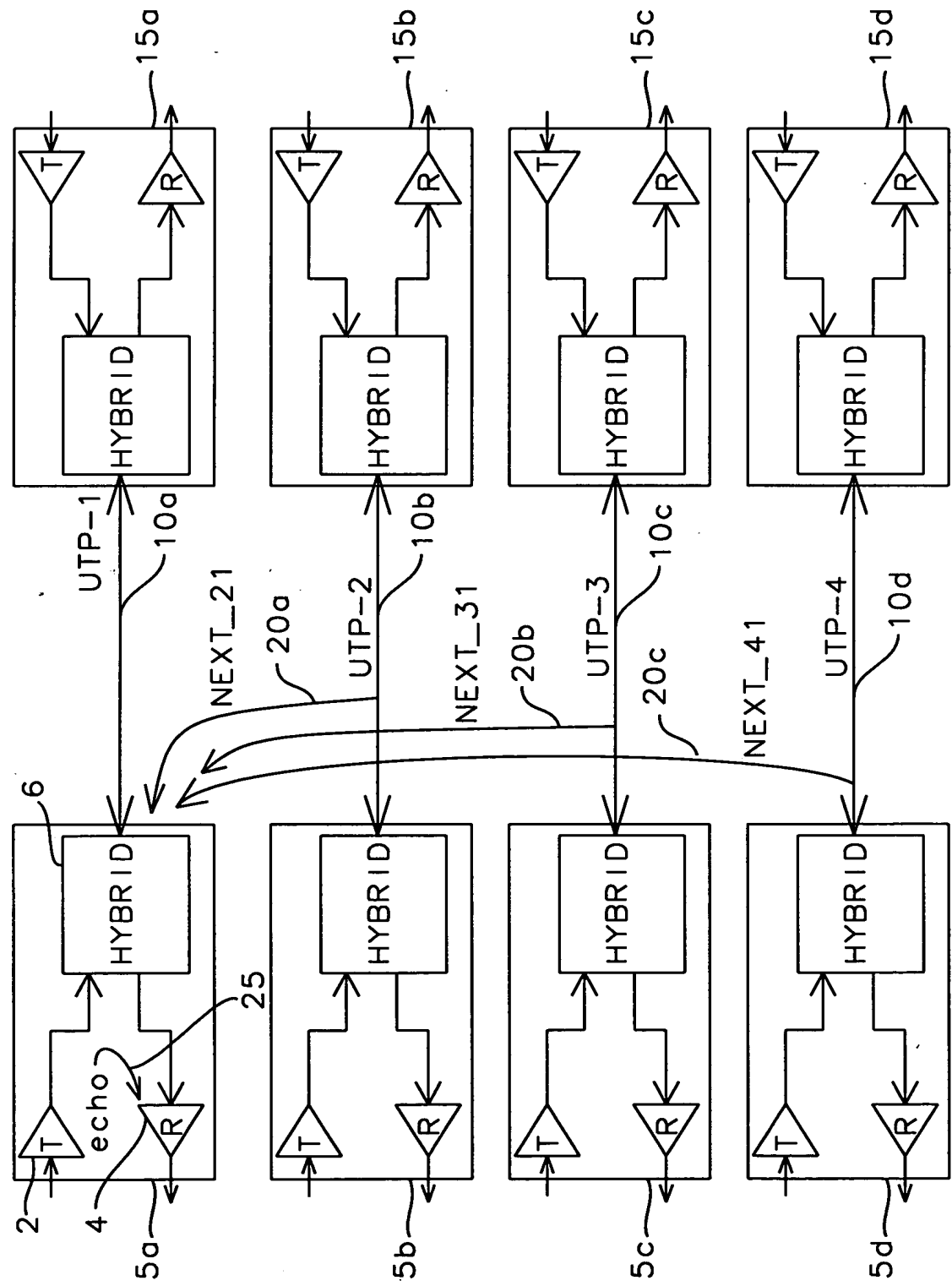


FIG. 1 - Prior Art

66477-8293460

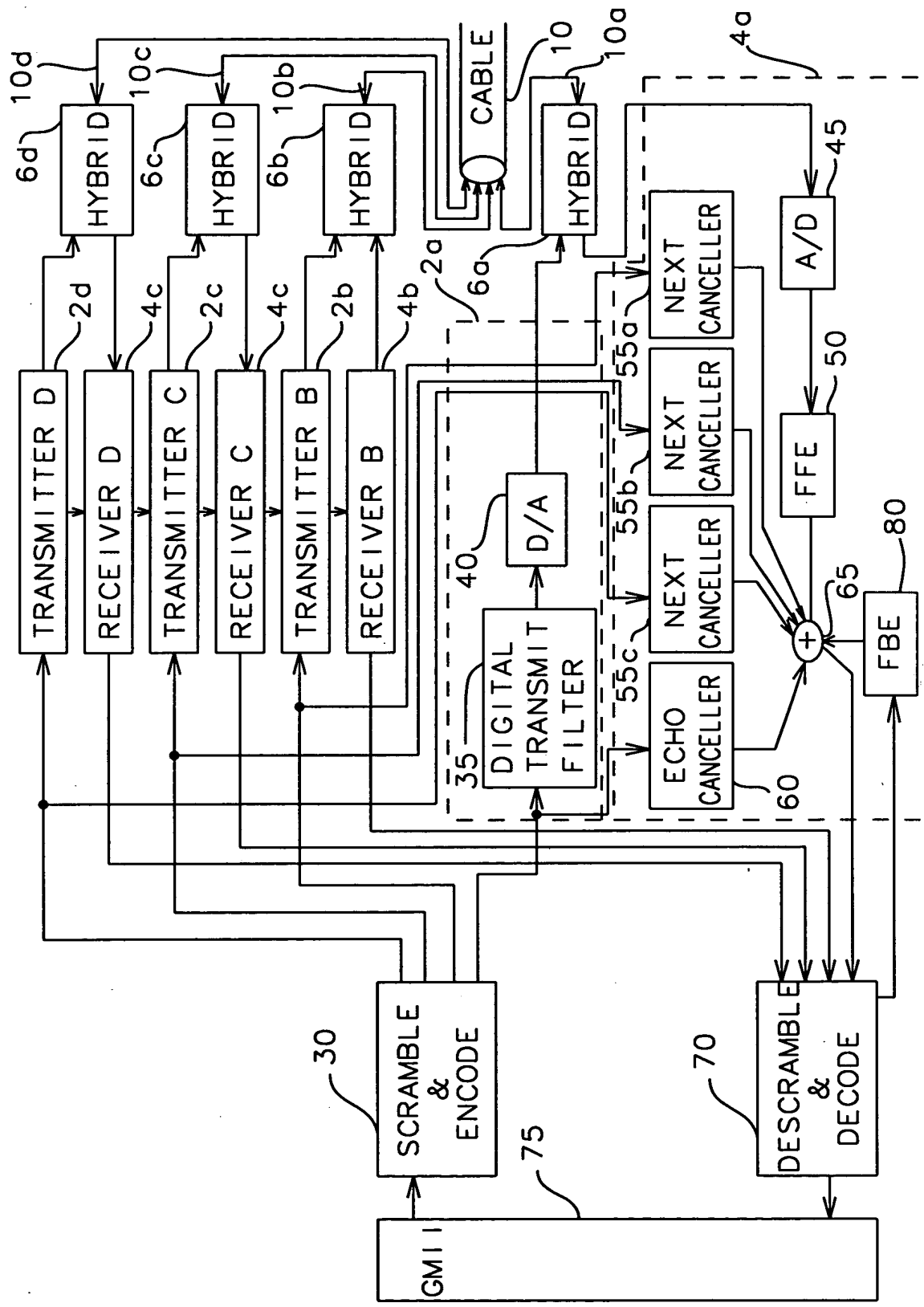


FIG. 2 - Prior Art

APPROVED	O.G. FIG.
CLASS	SUBCLASS
DATE	IN

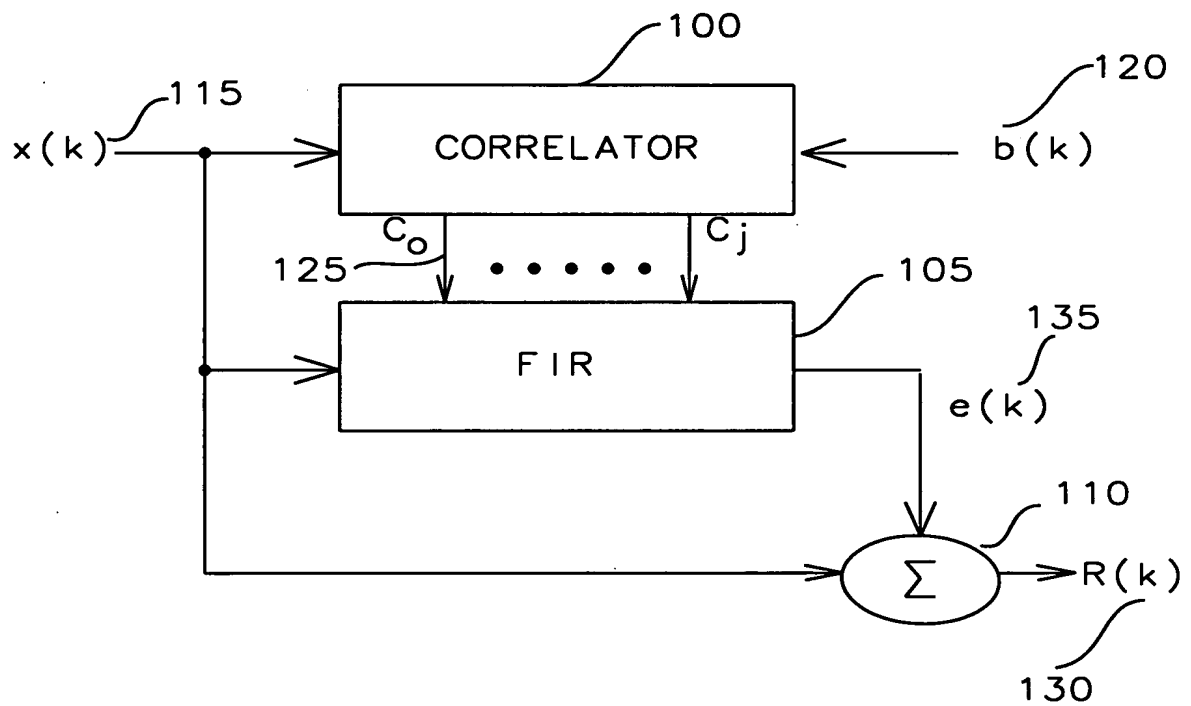


FIG. 3 - Prior Art

664727-8229460

100

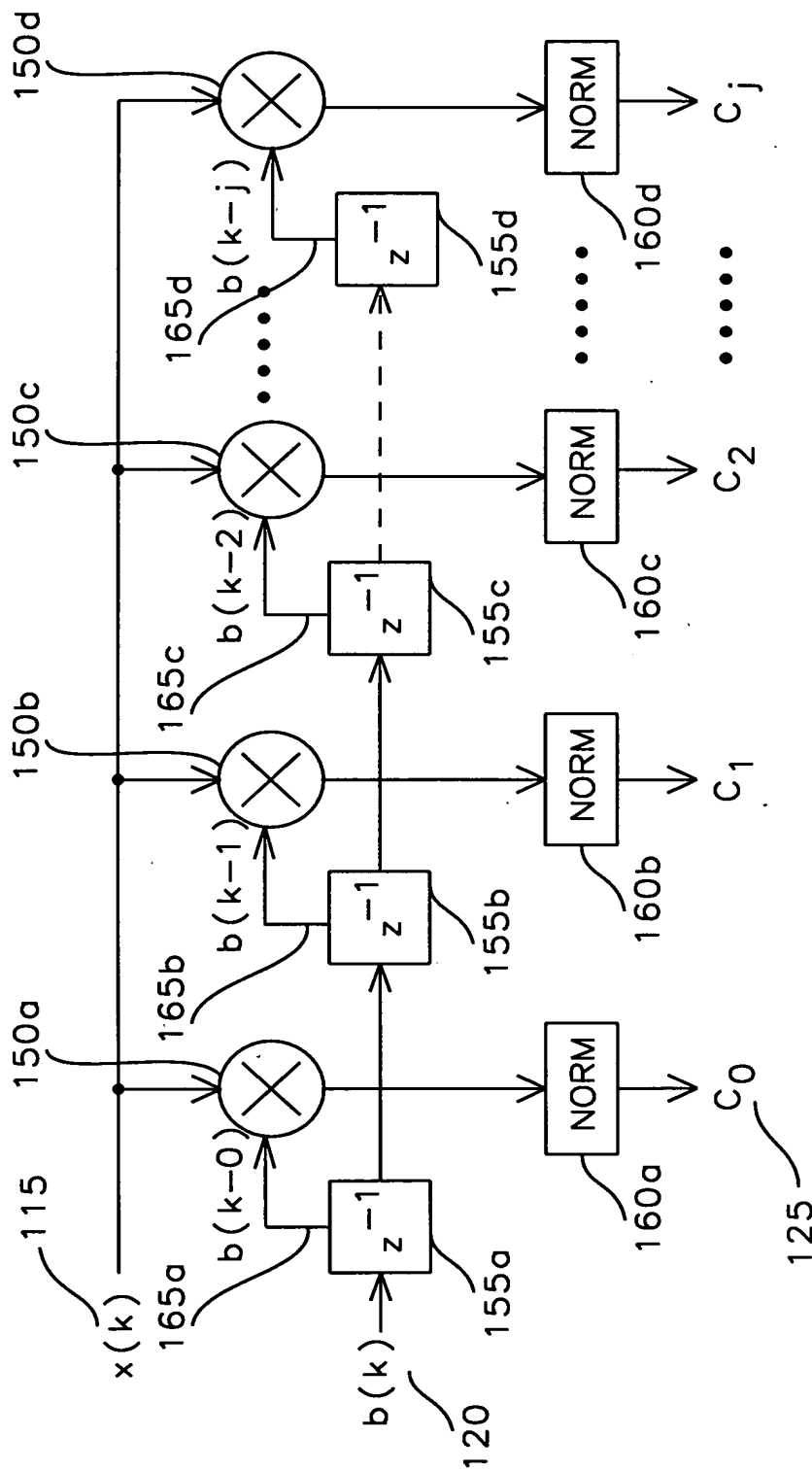


FIG. 4 - Prior Art

6647-8225460

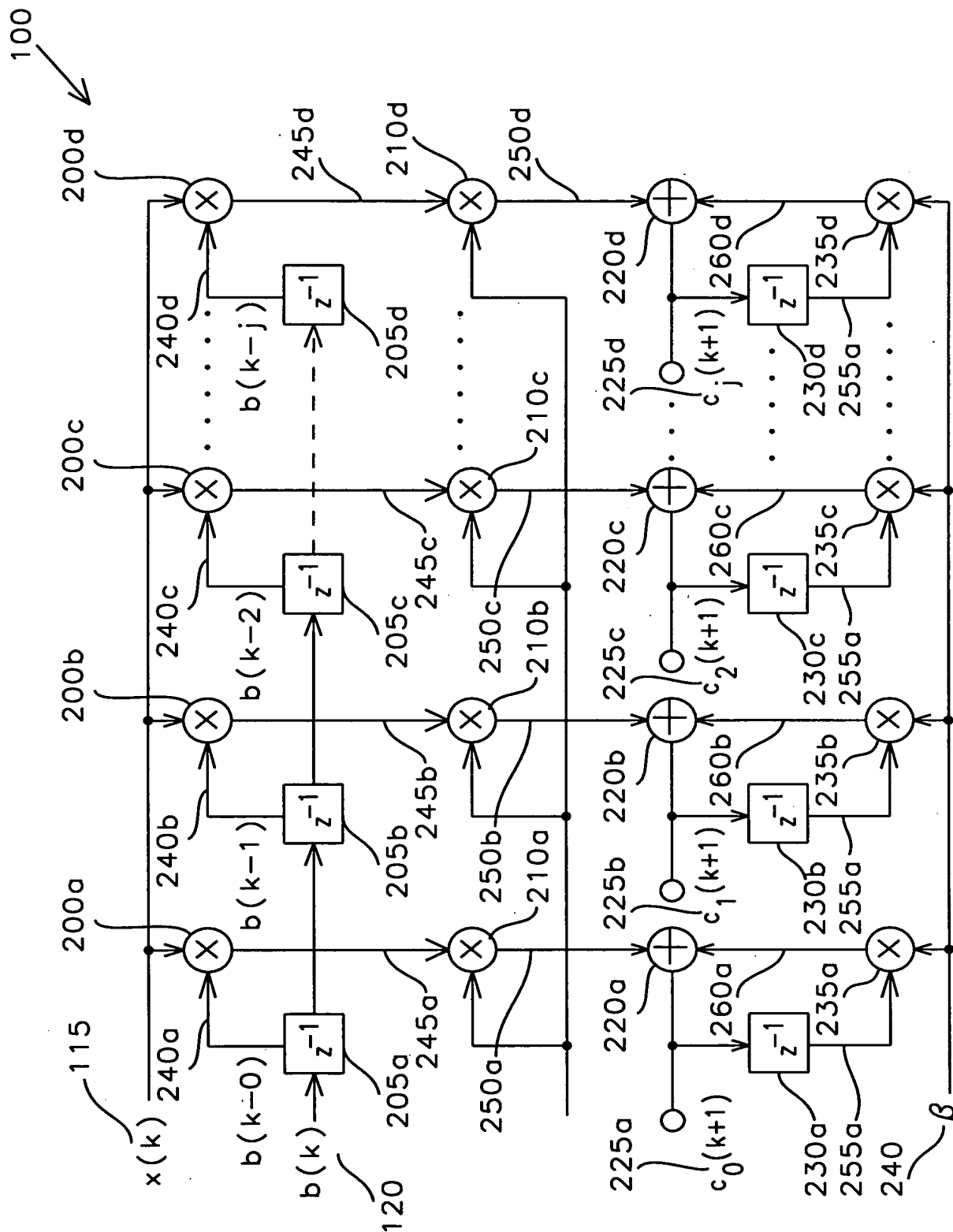


FIG. 5

Figure 6 is a block diagram illustrating a parallel processing system for calculating the sum of products of two vectors, $x(k)$ and $b(k)$. The system is divided into three parallel processing channels, labeled a , b , and c , each corresponding to a different component of the vectors.

Channel a (Left):

- Input $x(k)$ is split into three parallel paths: $300a$, $300b$, and $300c$.
- Each path passes through a **SHIFT** block (340a, 340b, 340c).
- The output of the shift blocks is fed into a series of **adder** blocks (375a, 375b, 375c).
- The adders are connected in a chain, with the output of one adder feeding into the next.
- The final output of the chain is $225a$, which is then processed by a **SHIFT** block (320a) to produce $225b$.

Channel b (Middle):

- Input $b(k)$ is split into three parallel paths: $305a$, $305b$, and $305c$.
- Each path passes through a **SHIFT** block (310a, 310b, 310c).
- The output of the shift blocks is fed into a series of **adder** blocks (375a, 375b, 375c).
- The adders are connected in a chain, with the output of one adder feeding into the next.
- The final output of the chain is $225b$, which is then processed by a **SHIFT** block (320b) to produce $225c$.

Channel c (Right):

- Input $x(k)$ is split into three parallel paths: $300a$, $300b$, and $300c$.
- Each path passes through a **SHIFT** block (340a, 340b, 340c).
- The output of the shift blocks is fed into a series of **adder** blocks (375a, 375b, 375c).
- The adders are connected in a chain, with the output of one adder feeding into the next.
- The final output of the chain is $225c$, which is then processed by a **SHIFT** block (320c) to produce $225d$.

Final Output:

- The outputs $225a$, $225b$, and $225c$ are combined in a final **adder** block (320d) to produce the final output $225d$.
- The output $225d$ is then processed by a **SHIFT** block (320e) to produce the final result $225e$.

FIG.

APPROVED	O.G. FIG.
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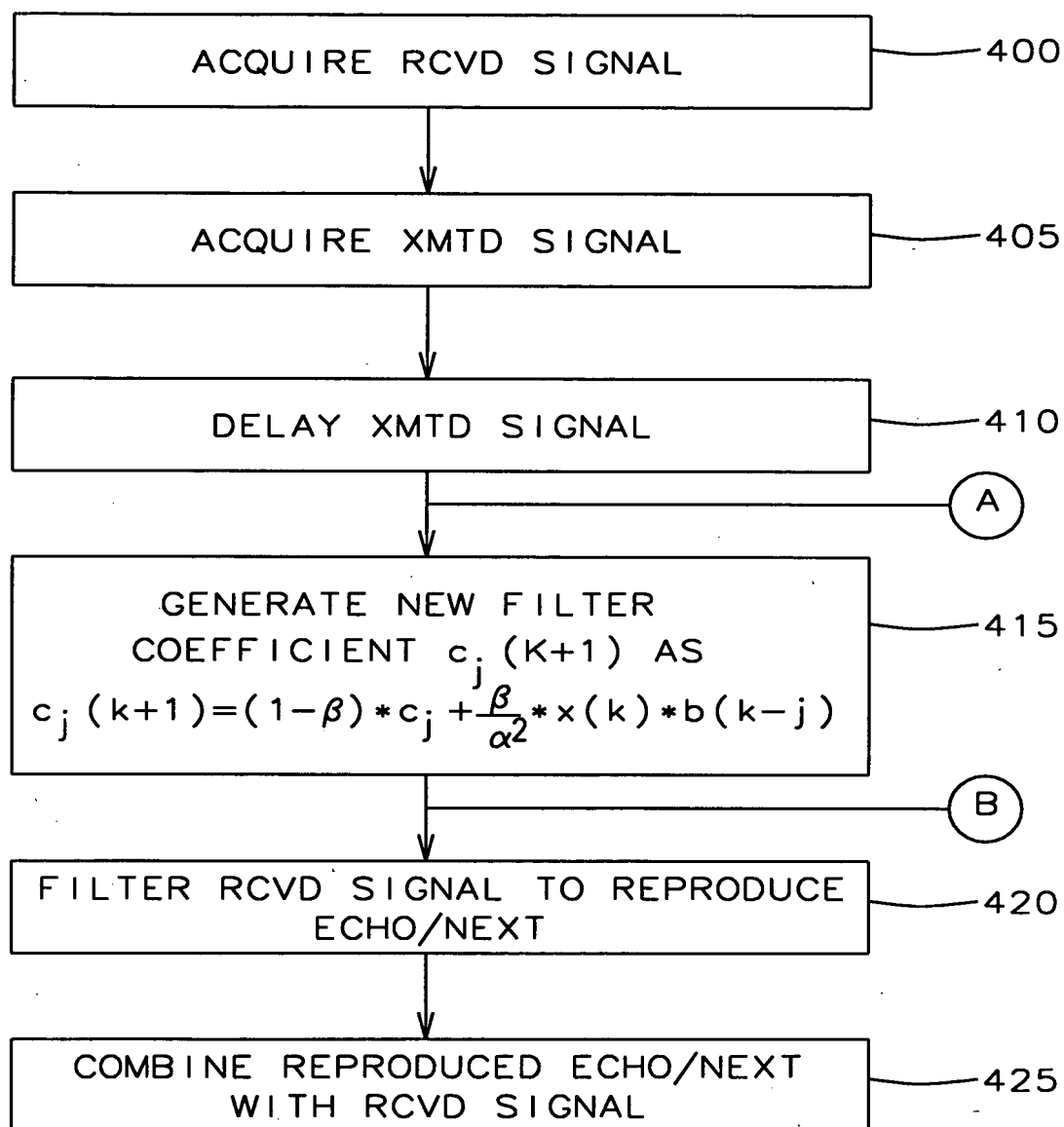


FIG. 7a

APPROVED	O.G. FIG.	
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DISPOSITION		

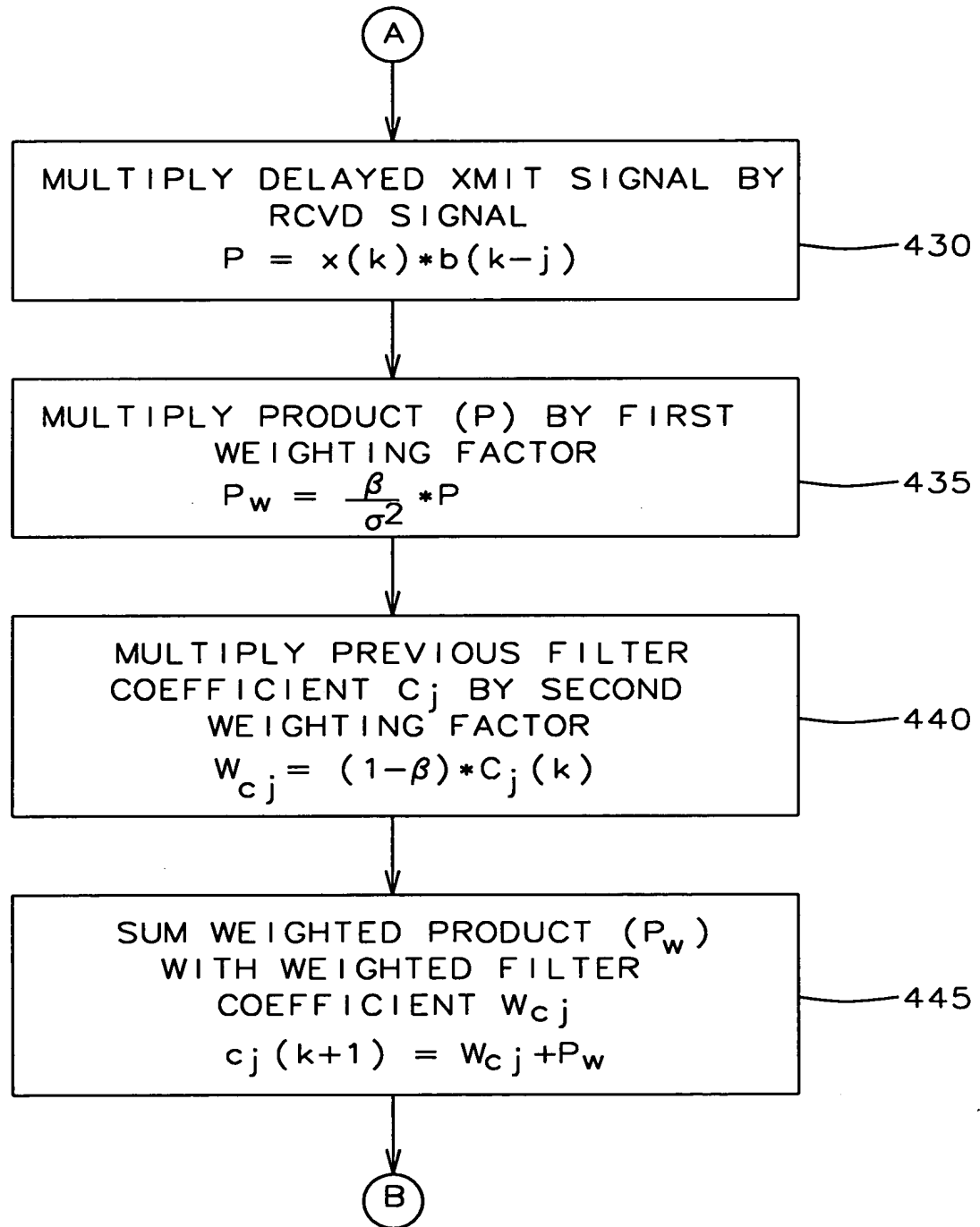


FIG. 7b

APPROVED	O.G. FIG.	
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DRAFTSMAN		

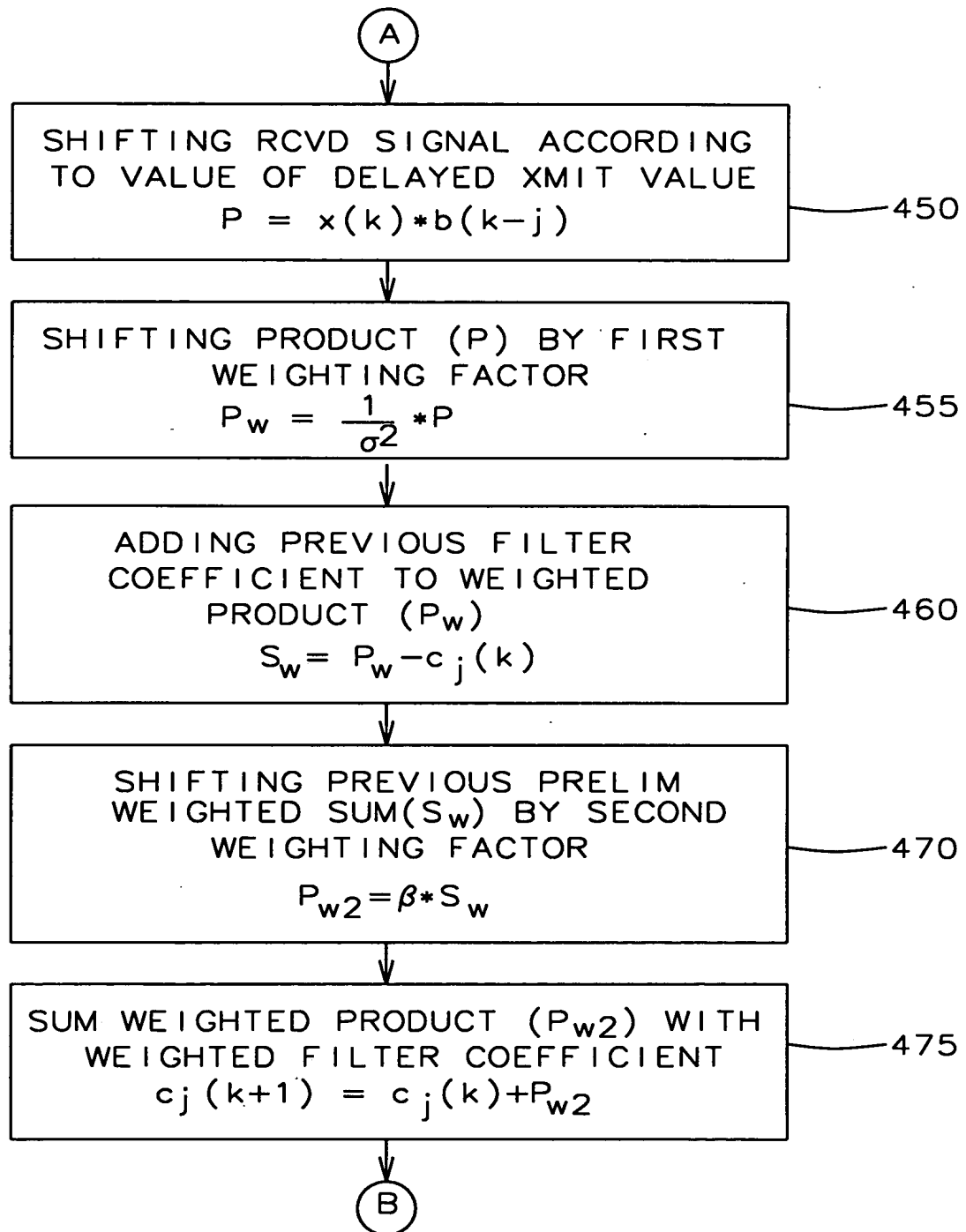


FIG. 7c